Serial No.: 08/750,715

Atty. Docket No.: 10496/P60752US0

generating a signal, based on [said] the component position, which signal (i) defines, within said sample volume, at a position in said environment a volume element, which has a volume V corresponding to the formula $10^{-9}l_{\geq}V \leq 10^{-18}l$, (ii) determines a time to transfer said volume element to [an other envoronment] another environment at a time when said volume element contains said [component] component and (iii) said controls said transfer;

transferring said volume element to the other [envoronment] <u>environment</u> at said time and under control of said signal.

- 34. (Amended) The method of claim 33, whereby said volume element is [transferred] transferred by means of a pore or capillary, which connects said sample volume to said other environment through [appertures] apertures in a membrane wall between said environment and said other environment, which smallest aperture is defined by a size D according to the formula $100\mu \ge D \le 0.1\mu$.
- 37. (Amended) The method of claim 34 wherein the pore or capillary has a lumen larger than the aperture in [said] the wall in direct contact with said sample volume.

Serial No.: 08/750,715

Atty. Docket No.: 10496/P60752US0

38. (Amended) The method according to claim 36 wherein [said] the withdrawal is performed by [the] an electrical field strength impulse, by briefly applying an electrical field at least once for electrophoresis of electrically charges components [and/] or for electroosmosis with coupled transport of electrically neutral molecules wherein one electrode [is in] electrically contacts a solution in said sample volume, while another electrode electrically contacts a solution in the other environment, and the volume sample is connected to the other environment conducting contact between the two through said [pore] pores.

- 39. (Amended) The method according to claim 36 wherein withdrawal is performed by [the] mechanically induced pressure difference impulse by applying at least one short impulse to increase pressure in the sample volume as compared to pressure inside a receptor compartment in the other environment [receptor compartment, and/] or by a short impulse to reduce the pressure inside the other environment.
- 54. (Amended) the method according to claim 53, wherein said illumination effects fluorescence signals from at least one volume element, which signals are registered (i) by confocal focusing using [a] confocal pinhole apertures in an object

Serial No.: 08/750,715

Atty. Docket No.: 10496/P60752US0

plane, [or] (iii) by coupling the signals into optical waveguides in the object plane, or (iii) by-multiarray detectors in the object plane.

55. (Amended) The method according to claim [55] 54, wherein at least two volume elements [in common, or assembled in groups,] are focused confocally onto at least one detector element of a photon registrating measuring element in the object plane during the signal registration, and whereby parallelized measurements are performed on said at least two volume elements.

56. (Amended) The method according to claim 33, wherein, in order to detect very low concentrations of fluorescing molecules, the sample volume is subjected to a scanning process prior to the locating step, whereby time required for locating said component is shortened by varying the definition of the volume element with respect to the sample volume[, continuously or discontinuously in time].

Claim 58, line 1, delete "2" and insert --34--.

59. (Amended) The device according to claim 58, comprising [of] an arrangement of a closed or open containing for receiving a sample volume, coupled